PROGRESS

VOLUME II NUMBER 5 MARCH, 1961

IN THIS ISSUE

AWARENESS · KNOWLEDGE · UNDERSTANDING
PREVENTION

THE ALCOHOLISM FOUNDATION OF ALBERTA

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AND EDMONTON CLINIC
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The Alcoholism Foundation of Alberta is a private Foundation incorporated in 1951 under the Societies Act, financed by provincial and municipal grants, corporate and private contributions. The Foundation's three point program of Education, Treatment, and Research, is directed at the eventual Prevention of Alcoholism in Alberta. Patient counselling, medical, educational, and research services are provided through the two centres in Edmonton and Calgary. The Foundation recognizes alcoholism as a treatable illness, a serious public health problem, and therefore a public responsibility.

TREATMENT

Treatment services are available to anyone desiring help with a drinking problem. The treatment program includes individual counselling, medical treatment, and group therapy. A service fee of $10.00 is charged to the patient. No patient is ever denied treatment due to inability to pay.

There are no consulting fees.

Edmonton and Calgary out-patient clinic hours — 9 a.m. to 5 p.m.
Monday through Friday.

The Alcoholism Foundation of Alberta

Executive Director - MR. J. GEORGE STRACHAN

PROGRESS

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Editor: T. G. Coffey

PROGRESS is published every two months as part of the Foundation's Educational program in order that a more comprehensive knowledge, greater understanding, and more objective viewpoint of the illness alcoholism be provided the people of this province. All material in PROGRESS is believed to have been obtained from reliable sources, but no representation is made as to the accuracy thereof. Opinions expressed in the articles themselves are not necessarilly those of The Alcoholism Foundation of Alberta, but are those of the authors reported.

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Comment

G. Donald Carson is the Consultant Psychiatrist to the Edmonton Clinic of the Foundation. In *A Psychiatrist Looks at Alcoholism* he writes of the particular problems of the alcoholic and suggests a reason for his excessive drinking. In Dr. Carson's opinion, the most effective role a psychiatrist can play in an alcoholism clinic is as a consultant to the treatment team. The alcoholic feels deeply his isolation, so that the first step to take in treatment is to make him feel accepted and respected by the therapist. Dr. Carson stresses the importance of the therapist's attitude toward the alcoholic. "We must be prepared to pick him up again and again."

The therapist's attitude is again discussed in *Hostility as a Barrier to Therapy,* a reprint from the Yale Treatment Digest. Sources of the therapist's conscious and unconscious hostility are reviewed. "But hostility, contempt . . . . will militate against success in treatment . . . Only in a warm and permissive atmosphere can the alcoholic best be helped on the road back towards a less malignant adjustment."

The *Physiological Effects of Alcohol* is the second in our series on alcohol. **Leon A. Greenberg** is Associate Professor and Director, Laboratory of Applied Biodynamics, Yale University. The article is a reprint of a lecture he gave to the Third Annual Alberta Conference on Alcohol Studies in 1956.

D. G. Stewart is a counsellor at the Edmonton clinic of the Foundation. *Tension in the Alcoholic* is a write up of a lecture he developed for the evening group therapy session for Foundation patients. With the use of the 'steam boiler' chart patients are enabled to understand the sources of their tension and how to

deal with it without a reliance on alcohol. This approach has also been of enormous value in explaining the alcoholic's problems to social workers, nurses, and other health and welfare workers. A reprint of the chart with an accompanying explanation is available from the Edmonton clinic.

A New Pamphlet

The Foundation has published a new pamphlet, *Help for the Alcoholic - What the Family Can Do.* The family of the alcoholic can play a most important role in persuading him to achieve and maintain sobriety. The pamphlet outlines the steps the wife, or husband, or other family members of the alcoholic can take to help him.

This pamphlet will be available from either the Edmonton or Calgary clinics of the Foundation.

'The Church, The Alcoholic, And the Community'

This is the theme of the Seventh Annual North Conway Institute to be held June 12 - 16, 1961. Details of the Institute will be found on page twenty-seven.

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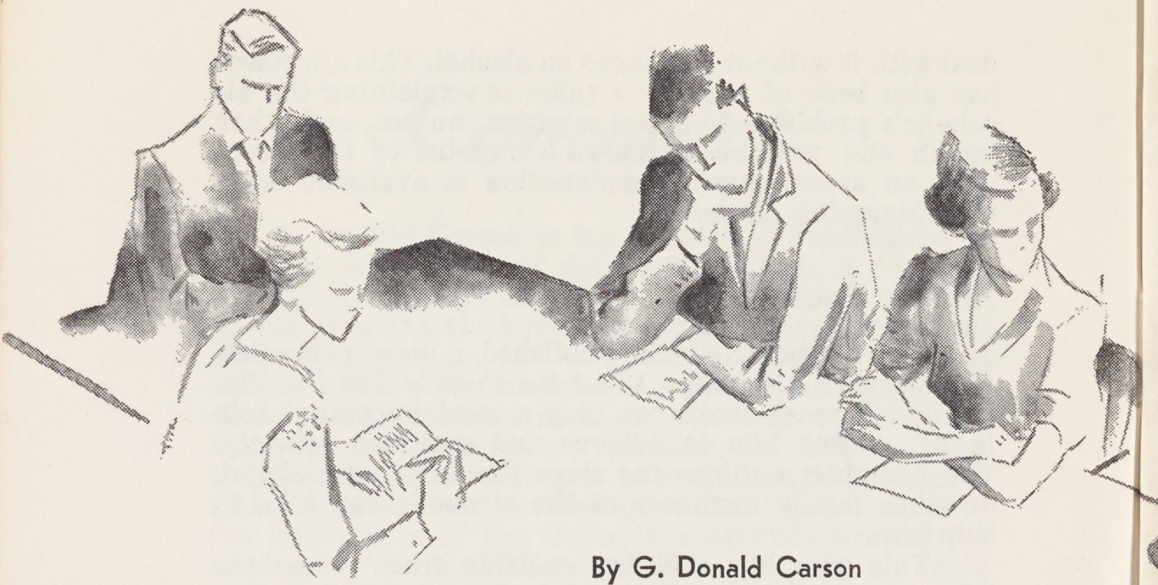


By G. Donald Carson

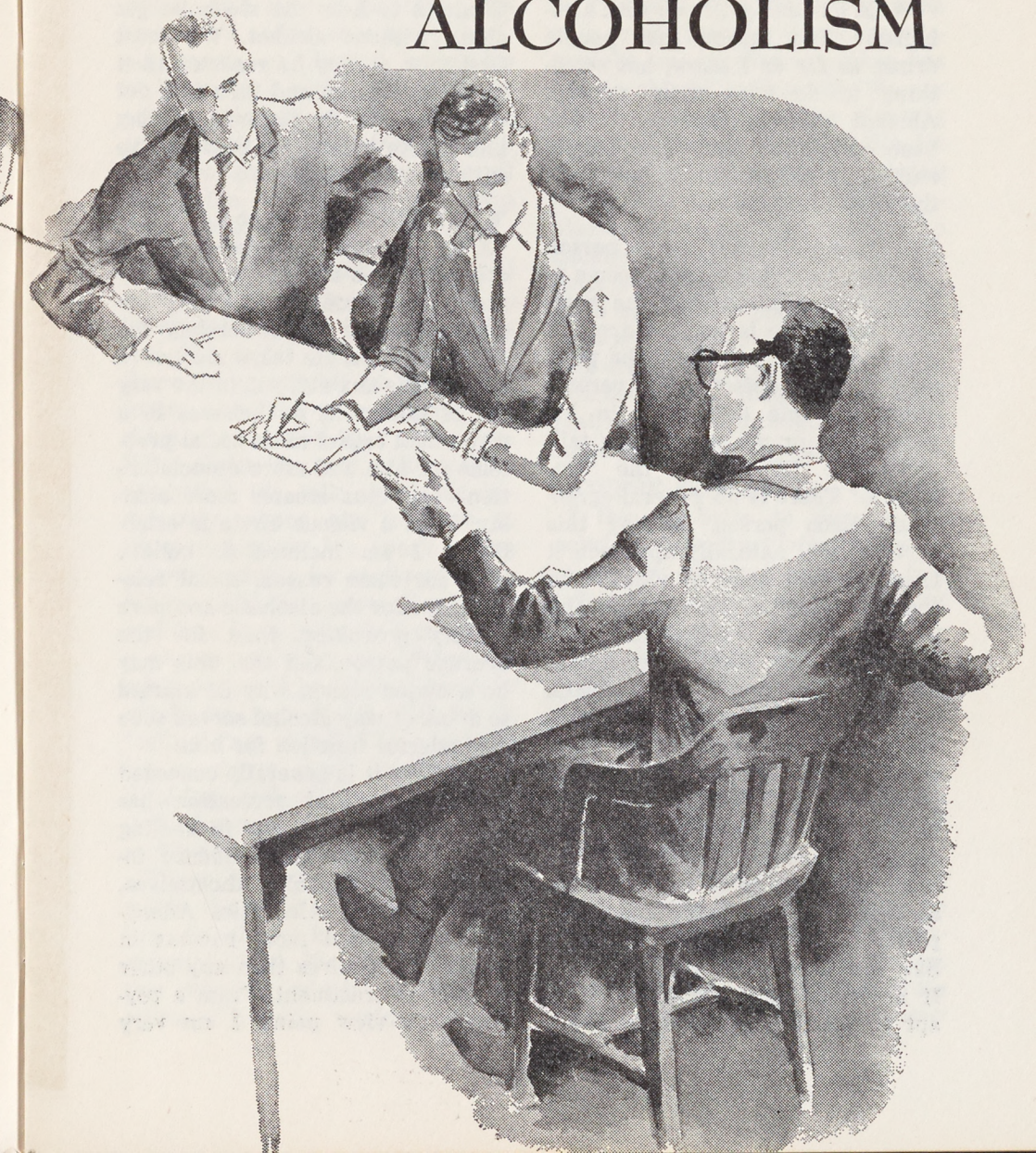
IN THE Alcoholism Clinic, we are dealing with the problem of alcoholism, which it is now generally accepted, is a treatable illness. As a physician I am concerned about illness. But as a psychiatrist, what is my place in the treatment of alcoholism? Dr. Sidney Vogel has said, "A survey of current medical and psychiatric approaches to the treatment of alcoholism indicates that at the present development of our knowledge, there is no general agreement as to the etiology, dynamics and therapy of alcoholism." I believe this to be true. I also believe, however, that there are areas which have been fairly carefully explored and about which there is fairly general agreement.

In the scientific investigation of any problem, we work most effectively by starting from what we know and working from there to the unknown. We must, as it were, establish a base of operations. Let me establish a base here from which we can consider the role of the psychiatrist and why he is on the treatment team in the first place.

First of all, alcoholism has to do with people. I once knew a dog who was addicted to beer, but, for the most part, this is a problem which involves human beings. We humans are social creatures. We begin life in close association with another human being who protects us from the cold and hunger and relieves our anxiety: that painful feeling which arises when we are threatened in some way. Maintaining contact with other people throughout our life is important to us. If we do not maintain this contact, we will become anxious, just as we did when we were children.

Psychiatrists are supposed to be specialists in human relationships.

A Psychiatrist Looks at ALCOHOLISM



As such, we are concerned with this problem of anxiety which seems to be relieved by a feeling of togetherness and increased by a feeling of separateness from others.

What has this got to do with alcoholism? The reason that people drink, as far as I know, has something to do with their anxiety. Alcohol relieves anxiety. It has been called our first tranquillizer and many people still regard it as the most effective one we have.

THE ALCOHOLIC is a person who, for some reason, seems to have more anxiety than the average. Why this is so, we are not quite sure. We talk about the presence of some defect in his personality, or some deficiency in his physiology, or we may simply talk about the "X" factor, the "Unknown." There is no general agreement. Each person tackling this problem will naturally approach it from his own point of view, from the standpoint of his training and interests. There is a danger in this that we will not give due consideration to the point of view of others.

The alcoholic seems to be more sensitive to the conflicts and pressures of daily life than the average man. He turns to alcohol as a support to enable him to limp along on life's course or, if things get too much for him, to escape from his anxiety. We know that alcohol is a pretty tricky support or crutch. I like the term, "the glass crutch." If he leans on it too much, it is apt to break and let him down. This is what happens to the alcoholic. He finds that alcohol instead of relieving his problems is adding to them and that if he continues to use it, it will kill him.

Our problem in the Alcoholism Clinic is to help the alcoholic get along without alcohol. We must first look at why he resorted to it in the first place and then find out what we can do towards helping him to live without it; because live without it he must.

YOU WILL remember I said that to become separated from others creates anxiety for us. I believe this separation is a very important source of the anxiety the alcoholic feels. He takes alcohol to relieve this anxiety, yet, in the very act of taking it, he behaves in a way which causes more social problems for him and more desocialization—and thus creates more anxiety. Thus a vicious circle is established. I am inclined to believe that, for some reason, social relationships for the alcoholic are more anxiety-provoking than for the average person and that this may be a major reason why he started to drink or why alcohol served such a wonderful function for him.

I believe it is generally conceded that the medical profession has not been too successful in dealing with alcoholics. The evidence indicates that alcoholics themselves, in establishing Alcoholics Anonymous, have had more success in helping themselves than any other method of treatment. From a psychiatrist's view point, I am very

interested in what has happened to bring about this phenomenon. I would like to point out that Alcoholics Anonymous is a social organization. It has to deal with people getting together, being together, and staying together. The alcoholic's ability to achieve sobriety seems to depend upon his ability to stay with this new group relationship. It is when he separates from the group that he again becomes anxious and as a result vulnerable to his enemy, "John Barleycorn."

SINCE IT HAS BEEN a social approach which has seemed to be most successful in dealing with this illness, it would seem that there is something in the social forces, the inter-personal relationships which would bear examining. What about the personality of the alcoholic? We talk about his immaturity, about his inability to tolerate tension. We speak of his unusual craving for excitement, for his need to be constantly happy and free from pain; in fact this is a phrase we often use. When we ask a person if he has had much to drink, he may reply that he is feeling "no pain." The alcoholic has a strong need to feel self-confident and poised. He hates to feel ill-at-ease, which of course is another word for being anxious.

There is a stage in childhood where the child seems to feel and has to feel that he is all powerful or omnipotent. We all go through this stage in which we think in terms of how the world affects us and not how we affect the world. We pay little attention to other people except inasmuch as they are concerned with us. Another word for this is ego-centricity. There is some indication that the alcoholic is a person who has never been able to get through this stage adequately, or somehow or other has had to retreat to it again. We say that he operates on the pleasure principle, that he denies reality. He uses various mechanisms to bring about his denial: he projects — blames others for his problems; he isolates — behaves as if the problems do not exist; he rationalizes — gives apparently plausible reasons as to why he should drink. He lives in a dream world and alcohol helps him to maintain these dreams until reality crashes through or, as we sometimes say, "he hits bottom."

THERE SEEMS to be a need for the alcoholic to change his point of view drastically before he can really master his problem and rejoin the human race. The first three steps of the twelve in Alcoholics Anonymous are: 1. We admitted that we were powerless over alcohol and our lives had become unmanageable. 2. We came to believe that a power greater than ourselves could restore us to sanity. 3. Made a decision to turn our will and our lives over to the care of God, as we understand him. These seem to have to do with giving up this feeling about being all powerful. In these steps he admits that he has no power over alcohol. He recognizes that there is a power

out and beyond himself to which he must appeal for help.

Dr. Harry M. Tiebout sixteen years ago spoke of what he thought to be the phenomena of conversion in the alcoholic. He described a pre-conversion in the alcoholic in which the person is tense and depressed, aggressive or stubborn. He is troubled with feelings of inferiority; yet deep down his feelings are of being really superior. He is a perfectionist and idealist, especially as applied to the other fellow. He is weighted down by an overpowering sense of isolation and loneliness. He is centered only in himself. Dr. Tiebout feels (and I agree with him) that as long as he remains in this state, even though he does not drink, he has made no progress towards recovery. It is only when he takes down these barriers created by himself, when he can begin to see beyond himself to the needs of others and re-enters the social world, that he can get out of himself and see beyond his own borders. To bring about this conversion is an important part of treatment. If we are going to help him to socialize, we must give him a social experience. This must be a social experience which relieves anxiety, does not create it. The alcoholic has been used to people calling him a bum, people feeling that he is no good. They point out to him all the things that he very well knows already: how he has neglected his family; how he has lost his opportunities. The average alcoholic is a pretty intelligent man or woman and he or she knows perfectly well about these circumstances. Social contacts on this basis can only create anxiety and can only further alienate the alcoholic from himself and society. They can do no good. We have to help him to remove his anxiety. We have to help him understand himself and to come to love himself instead of hating himself.

IT SEEMS to me then important that those who are to help the alcoholic must be able to accept him as a sick person and treat him with respect. He is already suffering from the ravages of disrespect both from the community and from himself, especially himself. The person working with the alcoholic must have some conception of the terrific battle the alcoholic must put up in order to control his drinking. The worker must be prepared to give up his own feeling of omnipotence and the feeling that makes us angry when the patient does not get along as well as we think he should. We must face reality. The alcoholic may very well backslide. We must be prepared to pick him up again and again.

The first step in a successful treatment program is towards helping the alcoholic feel that he is respected as a person—liked for himself. He is helped to recognize that he has people who are willing to help him, but he must also appreciate that he has a part in this help, that unless he cooperates

and works on his own behalf, nobody can help him. Each one of us feels the way we do and actually it is hard for us to feel otherwise or even that there is any other way to feel. It is only when we review our lives with the assistance of an understanding person who understands something of the operation of the mind, that we can begin to see the areas in which we had anxiety, we had hostility, in which we built up defences against people.

The Psychiatrist's Role

A psychiatrist has been trained to understand that there are areas in the mind, and powerful areas, which do not reach the consciousness. He has studied inter-personal relationships and he has learned to recognize that the laws of cause and effect apply here as in any other area in the world. The psychiatrist is a useful member in the treatment team in helping the other workers become aware of these things and see them more clearly.

I believe the psychiatrist can best serve as a consultant to those directly concerned with the treatment of the alcoholic. If he does do treatment, it should be on a group basis rather than on an individual basis. The social workers, psychologists and other members of the treatment team can, in talking with the psychiatrist, be helped towards considering aspects of the situation which they might have not previously considered. This helps towards the formulation of the situation in which the illness appears. It also helps to see the dynamics in the areas in which efforts of treatment stand the most chance of success.

DR. G. DONALD CARSON

TENSION in ALCOHOLICS

by D. G. Stewart

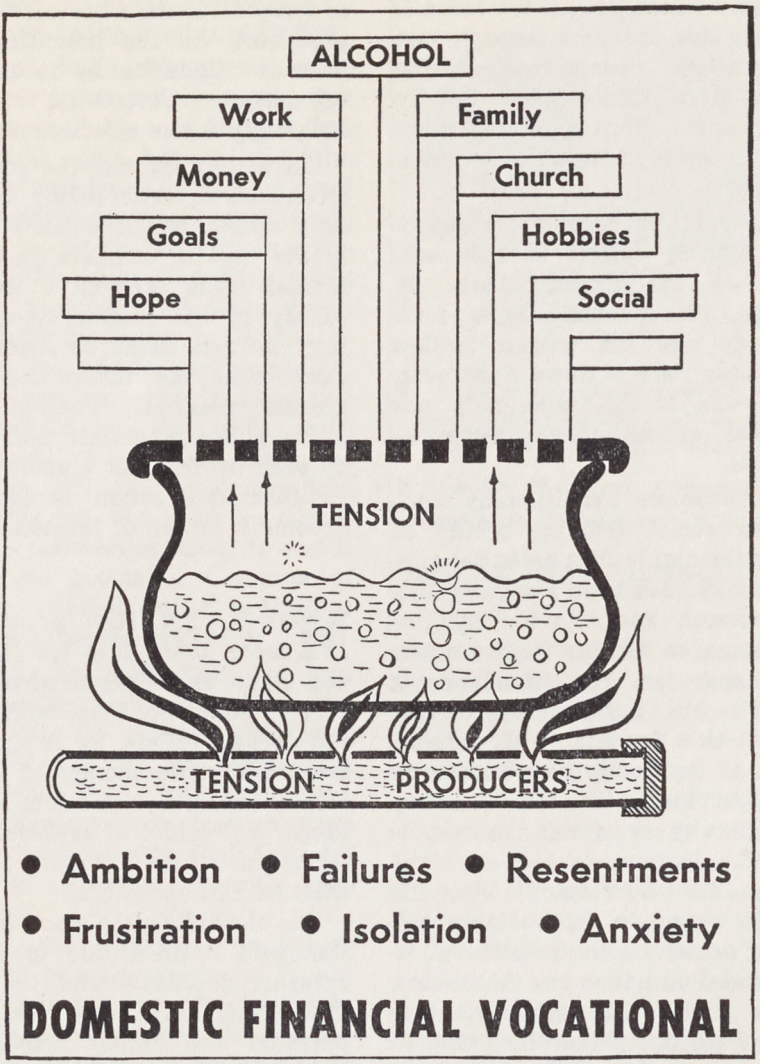
TENSION is a necessary part of our existance. It gets us up in the morning, gives drive and purpose to our activities, helps us accomplish tasks and objectives and fulfill our responsibilities as social beings. Within reasonable limits, tensions are a vital and worthy ally. People with too little or too much tension develop problems of many kinds.

Tension plays an important role in the life of the alcoholic. Most alcoholics have excessive tension. The reason for this excessive tension is not fully understood. Dr. M. Freile Fleetwood[1] suggests that alcoholics can obtain a greater degree of tension reduction by the use of alcohol than the non-alcoholic. One can presume that the alcoholic learns to handle his tension in this easy, quick, reliable and effortless manner. Recovery from alcoholism must take this learned behavior into consideration.

All who have worked with alcoholics are aware of the tremendous tension most of them feel when they apply for treatment. It is important that the therapist help the patient understand something of the general nature and function of tension in addition to determining ways of relieving it.

Everyone is constantly being bombarded by new stimuli which create tension; so we must have a way of draining off this accumulating tension. Our ambitions, frustrations, successes, failures, and many other daily experiences build up tension or pressure. This pressure motivates activity, which uses it up, thus producing a feeling of satisfaction. Much of this activity is channeled toward socially approved goals and personal achievement.

AT THE Foundation we have developed a simple illustration of how tension is built up and dealt with. We have found the accompanying chart a useful tool in helping patients to understand tension production and reduction and in explaining to them why they experience such intense distress when they quit drinking. In addition, this visual aid has been most



effectively used in illustrating to social workers and nurses why the alcoholic has such difficulty in giving up drinking completely.

We make an analogy between a steam boiler and a human being. The fuels for the fire are the life situations which produce tension. Some of these are internal, such as failures, resentments, isolation; and others are external, such as problems within the home or on the job, involving other people.

The fire heats the boiler and the

pressure inside grows. We learn to release this pressure through various outlets representing satisfactions—Hope, Goals, Work, Family, Church, etc. Thus a tolerable and useful level of tension is maintained.

The potential alcoholic uses similar tension outlets in the same way. As his disease slowly develops, the alcoholic loses satisfactions and his tension outlets gradually narrow down until eventually he is left with only one method of relieving pressure — alcohol.

For example. Traditionally much of our social drinking occurs on Saturday nights. The potential alcoholic may have been a regular Sunday church-goer. As his drinking increases, so will his Sunday morning hangovers. His attendance at church will not have the same satisfaction for him with a hangover, so eventually he will give up going to church. The tension reducing activity or outlet, church, is closed.

As the developing alcoholic drinks more on increasingly frequent occasions, the tension relieving social activities are threatened. If he finds that, regularly, he is having to telephone his host or hostess of the night before to apologize for his condition and behaviour (sometimes without really remembering what happened), then such social activities are no longer satisfying. They, themselves, become a source of tension. A feedback develops, wherein many former tension reducers become tension producers. So the potential alcoholic now finds that he has increasing amounts of tension with decreasingly fewer effective outlets.

Let us suppose that the potential alcoholic's favorite hobby is spectator sports, and like many others in the crowd, he never goes to a football game without a flask of whisky in his pocket. Sooner or later he may drink so much at a game that his intoxication and aggressiveness attract the attention of the police, who warn him not to be seen drinking at a game again. Another satisfaction is lost and become a source of tension.

MORE TENSION producers mean more fuel for the fire and so an enormous head of pressure is being built up, with but a few escape outlets. He is spending more and more money on liquor. Money becomes a problem and no longer a provider of satisfaction in terms of what it might buy or what he can do with it.

The alcoholic's goals now become less well defined due to his increasing problems and he starts putting off until 'next year' many personal and family responsibilities. His family becomes increasingly exasperated with the alcoholic's dependence on alcohol. Soon family problems outweigh family satisfactions. His family members learn that they can no longer depend on him and frequently exclude him from their

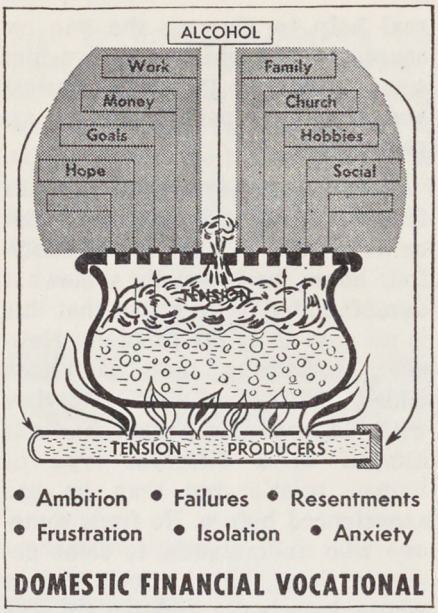
plans and activities. Isolation adds more fuel to the mounting flames.

The alcoholic will strive to make it appear to the outside world that all is normal. He may flop as soon as he gets home, but on the job he is determined to appear as a staid and steady person who occasionally drinks too much. The cost in maintaining this front at work is taken out in a number of other areas. Gradually, however, he begins to lose control of this part of his life as well and work provides less and less satisfaction. He finds more and more to complain about at work. He will still tenaciously hold on to his job, but since he is getting no satisfaction from it and it is instead becoming a source of tension, another outlet is blocked and the pressure increased.

Finally he is left with two outlets—alcohol and imagination. The point will be reached, however, when he is so sick and shaky from a drinking bout, that even hope and phantasy are beyond him. When he begins to feel *hopeless* then his situation is truly desperate.

The alcohol valve is no longer just one of many valves as it was at one point in his life; it is now the emergency valve. Unless he opens it frequently, he will blow up with the tremendous pressure within him.

SOONER OR LATER the alcoholic realizes that alcohol itself has become a contributing tension producer and so he does the

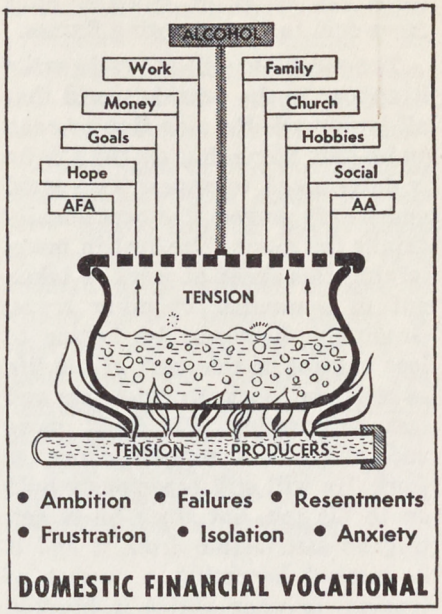


natural and normal thing under the circumstances and that is to cut off the alcohol. Now he has no method by which he is able to gain any satisfaction or relief from the pressure. Like a steam boiler, a person can handle only so much pressure before exploding. With the alcoholic, he explodes back into further drinking. One only has to observe the alcoholic in a drinking session to see the pressure being released. Frequent crying, loud shouting, fights, valiant attempts to do impossible tasks appear to indicate the tremendous internal struggle that is going on. So the alcoholic learns that stopping drinking is neither easy nor does it seem to be the answer to his problem. Thus far in all his experiments he has found it of no

real help to give up the one resource he has which will give him some relief from the acute physical and emotional pain which he experiences.

When the new patient seeks treatment and it is suggested that he not drink for a period of twenty-four hours, he is usually somewhat dumbfounded as he knows that this is no answer to his problem. However, something new has been added. With that first interview with the treatment person, he finds himself in a different type of human relationship than he has experienced before. He finds someone who understands, to some degree at least, how he feels and in whose knowledge and ability perhaps he can put a little faith and trust.

What is happening in terms of the steam boiler is that a new outlet has been opened. This is referred to as AFA (Alcoholism Foundation of Alberta) on the chart. The patient finds that just being able to tell how he really feels to someone takes off some of the excess pressure which in the past has always caused him to explode. As he is able to gain more trust in his counsellor, he is better able to handle this tremendous pressure since more of it is now being drained off. All patients coming to the Foundation are encouraged to develop an AA contact, which can also be a pressure outlet. Now the patient has two ways of handling pressure: thus recovery begins.



If the patient is working, he begins to do a better job and, perhaps for the first time in years, gains some satisfaction from his work. If he is not working, then the very fact of getting out and seriously looking for a job brings some level of satisfaction in itself.

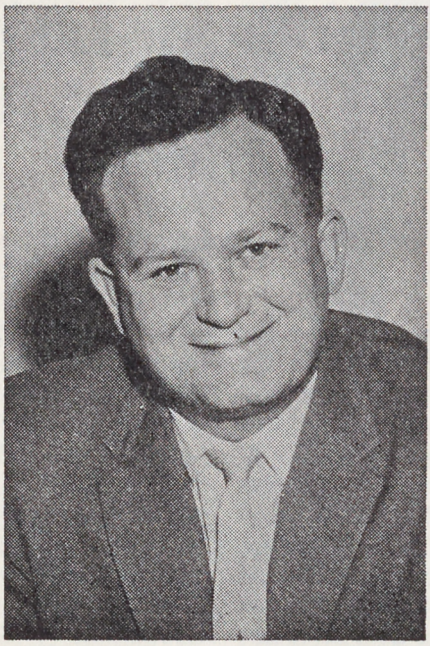
We now enter a dangerous period. Alcoholics tend to be excellent workmen and, therefore, find a great deal of satisfaction from their work. Many patients are tempted to stop their program of recovery after opening the three valves, of the Foundation, AA, and work. The danger is that the patient can get so engrossed in his work situation, working long hours, that he feels unable to keep up with his treatment contacts. If he allows himself to be boxed in

again, he is endangering his sobriety. Work and work alone will not provide that much satisfaction.

RECOVERY from alcoholism demands that the patient continues a program of expanding out and opening up one after another of the various avenues of relief from tension. The tension is there; it is real; it is there in apparently larger quantities with the alcoholic than with the non-alcoholic. He has learned to handle his tension in the past by drinking. Drinking has itself become a tension producer, so he has to *relearn* or *create* other tension outlets. In this way he is able to bring the pressure down to manageable quantities, with which he can live comfortably and constructively without alcohol.

REFERENCE:

FLEETWOOD, M. F. Biochemical experimental investigations of emotions and chronic alcoholism. Etiology of Chronic Alcoholism. Springfield; Charles C. Thomas; 1955.



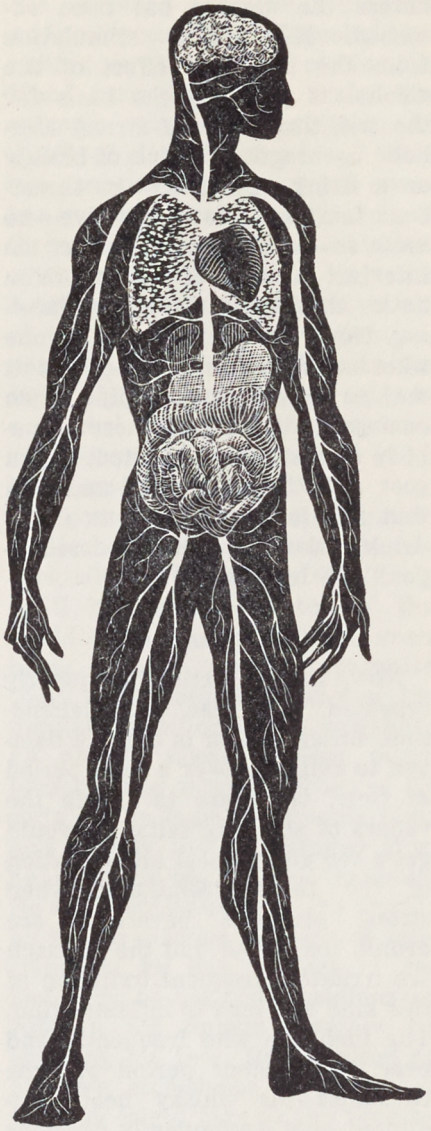
D. G. STEWART

THE PHYSIOLOGICAL EFFECTS OF ALCOHOL

by Leon A. Greenberg, Ph.D.

IT WASN'T too many years ago that the whole question of the action of alcohol on the body—on man—was settled with superb simplicity. You took a tumbler of pure alcohol and broke an egg into it. The albumen, of course, turned white, coagulated, and shriveled up. By analogy the man who imbibed became the tumbler; its contents (his brain and liver) became the white of the egg; and what happened to the egg, happened to the man. His grey matter clotted and shriveled; his nerves dried up; he stumbled over his toes when he walked; be blurred his words; and his liver dried up until it resembled the sole of an old boot with the hobnails showing — you know, "the hobnailed liver." Oh yes, and he beat his wife — that was part of the physiology — and nothing remained to be added to the pathology of alcohol. It was all very graphic, very simple, and very satisfying. But since that time, we have learned some real facts about

the effects of alcohol on the body, and it is about these facts that I want to talk to you now.



Irritation of Tissues

When an alcoholic beverage is swallowed, the first tissues with which it comes in contact are the surface tissues of the body. By the surface tissues, I mean the lining of the mouth, the larynx, the esophagus, and the stomach. I include these as surfaces of the body because they are really outside the body. Pure alcohol is an intense tissue irritant. A 50%, a 40%, or even a 30% solution of alcohol, as occurs in many alcoholic beverages, is equally irritating. If you put any of these beverages into your eye, you get a burning, a smarting, and a redness. Take my word for it—I wouldn't do it. Similarly, if strong alcoholic beverages are swallowed, the mouth, the throat, the digestive tract are irritated. The immediate indication of this irritation is through sensory nerves in the throat, in the esophagus. These nerves are affected precisely as they would be from the inhalation of smelling salts which is also an irritant.

Reflex Stimulation

In response to this irritation there is a reflex action— again, as from smelling salts. A deep breath is taken and the heart beats faster for a few moments. This brief stimulating effect—and incidentally this is the only stimulating effect from the alcohol—is really not from any action of alcohol inside the body because it occurs

before the alcohol has been absorbed. This reflex stimulation from the irritating effect of the alcohol is probably the basis for the traditional use of strong alcoholic beverages—a drink of brandy or a drink of whisky—in threatened fainting. It is as effective—no more so—as smelling salts. Let me interject a note of caution. You notice that I said *threatened* fainting. Never give a drink to anyone who has really fainted because it may go down the wrong pipe. In an emergency situation where somebody seems to have fainted, if you spot a bottle of whisky and feel that this is the occasion to use a drink, take the drink yourself — you'll do less harm!

Inflammation

Now, this irritation, frequently repeated, may lead to inflammation. Inflammation is organic damage to cells. If, over a long period of time, one were to inhale the vapors of smelling salts, he would get a red and painful inflammation of the throat. Similarly, when strong alcoholic beverages are drunk, the throat and the stomach are irritated; frequent irritation of this kind will lead to inflammation. The inebriate who frequently and over a persistent period of time consumes his whisky neat — undiluted—not uncommonly develops what is called "whisky tenor" voice and a chronic gastritis—a chronic inflammation of the stomach. In concentrations below 15% or 20%, alcohol causes a little irritation in the tissues of the mouth, throat, esophagus, and stomach. Below 5% or 6% (and I wish you would remember these figures) there is no irritation. Now I particularly call your attention to these figures because, as we will see in a little while, the concentration of alcohol occurring in the blood, in the tissues, in the fluids, in the flesh of a person's body, even in extreme intoxication, is only 1/100 of that 5% or 6%. This concentration does not irritate surface tissues of the body and is without effect on these tissues. The highest concentrations of alcohol ever occurring in the blood or in the flesh after alcohol has been ingested, even in fatal intoxication, is far, far lower than that which can cause irritation or inflammation of the tissues of the body. It doesn't damage the brain; it doesn't destroy cells; it doesn't corrode them; it doesn't dissolve them; it doesn't dry them out.

Depression of Central Nervous System

In the high specialization of the functions of the different cells and different tissues in the body, there is a wide variation of resistance to disturbing influences. Amongst the various tissues of the body, the nerve cells of the central nervous system of the brain, because of their specialized function, are far more sensitive to the functionally disturbing effects of alcohol than any other cells or tissues in the body. When ingested alcohol has been absorbed from the stomach,

from the intestinal tract, from the alimentary tract; when it has been absorbed into the blood stream and has been carried to all the tissues of the body, even very low concentrations of alcohol disturb the functions of the brain cells. Let me repeat, that the concentration of alcohol in the blood which abolishes—completely wipes out—the function of the brain cells is far lower than that which would have any appreciable effect upon the functions of any other tissues of the body.

Functional Disturbance

The very first effect of alcohol, therefore, is a depression of the nervous system. The intoxicating effects of alcohol are exercised on the brain. The disturbance that occurs there is a functional disturbance. There is no destruction or burning-up of the tissues. It is a functional disturbance and this disturbance is exhibited, not in the brain, but in those organs that are controlled by the brain. Behavior is impaired: the man slurs his speech, he staggers, he appears drunk—not because of the alcohol in his knee, or in his toes, or in his tongue, but because of the effect of the alcohol on that portion of his brain that controls these parts of his body.

Lowest Level of Intoxicating Effect

The degree and nature of the brain disfunction resulting from the presence of alcohol depends on the concentration of alcohol prevailing in the brain or in the blood surrounding the brain. For example, at a concentration of 0.05% of alcohol in the blood (this is a concentration that would occur in a man of average size after about three cocktails, or three whiskies, or three bottles of beer) only the functions of the uppermost levels of the central nervous system appear to be disturbed. This is the level of the brain that is said, in a general way, to be the centre of inhibitions, of restraint, of judgment, and of self-control.

A person with this concentration of alcohol, that is, after about two cocktails, is the fellow that feels as if he's sitting on top of the world. He is at last a free human being. Some of you may recognize these characteristics. Many of his normal inhibitions have vanished; he usually takes a great many personal and social liberties of all sorts as the impulse prompts him; he's usually the long-winded guy; he enlarges on his past exploits. He can lick anybody in the world; he has an obvious blunting of self-criticism; he has feelings of remoteness; he has odd sensations on rubbing his fingers together or touching his face. He's amused at his own clumsiness or rather at what he might take at the time to be the perversity of things about him—when he goes to touch something it slips away from him. This appears at the lowest level of intoxicating effect.

Mild Intoxication

Now let's go another step higher to 0.10% of alcohol. This would be from four or five whiskies or cocktails—about seven ounces of distilled spirits. At this concentration of alcohol in the blood, disturbance of function begins to descend to the lower areas of the brain—the motor areas. Now the individual begins to stagger slightly. He has difficulty in putting on his overcoat; he gets his hands in the wrong sleeve; he fumbles with the key in the door; his tongue somehow or other refuses to say correctly the words that he wants to say.

Now up to this point, this is what we generally refer to as slight or mild intoxication. The important feature of this condition is that there is a depression, not a stimulation of the brain function. Even the smallest amounts of alcohol reduce sensitivity. Of course, we must remember that the drinker often denies these effects. He may often assert, on the contrary, that he improves, that he is much better than he was, that he never did so well before—so he feels.

Now the reduction of judgment is another very important effect of alcohol even at this low level of intoxication. Not only judgment about things and people are reduced, but self-discrimination also. Perhaps some of you have had the experience of arriving late at a cocktail party. As you walk in, the first thing you notice is that people's voices have grown much louder than normal. Then you look over in one corner of the room and you notice that the most phlegmatic and most stupid guy in the crowd is standing there telling jokes and, what's more, everybody else is laughing at them! Of course, remember that everybody else has been drinking too, and their judgment is not so good. After a few drinks, you become aware that you, too, are now making really profound and witty remarks. But, if you were to hear on the following morning a phonographic playback of your remarks, your witticisms, your profundities, you'd have more than the usual headache.

Later Stages of Intoxication

Let's consider a concentration of 0.2% of alcohol in the body. This presupposes the ingestion of about 12 ounces of whisky. At this concentration of alcohol, the function of the entire motor area of the brain is disturbed. Further, there is disturbance of the function of the mid-brain, the "filtering station" for emotional expression. With this concentration of alcohol, the individual staggers very perceptibly. He needs help to walk; he needs help to undress. He starts to assume a horizontal position. He's easily angered, he shouts, he groans, he's apt to cry.

Let's move along to 0.3% of alcohol—the equivalent of half a bottle of whisky. With this amount of whisky in the body, the lower, more primitive areas of the brain

(those concerned with sensory perception) are markedly dulled. The drinker is in a stuporous condition. Although he is awake, he has no comprehension of what he sees or hears. And then at 0.4% to 0.5% of alcohol—and this is about ¾ of a bottle of whisky or its equivalent —the perceptive area of the brain is usually completely cut off. The individual is unaware of his environment, he is in a coma, a complete stupor. He is, if you will, anaesthetized: you could take out his tonsils if you wished; he is in surgical anaesthesia.

And then, finally, at 0.6% to 0.7% of alcohol, the impairment descends to the very base of the brain, the stem of the brain where the centre for heart-beat and breathing are located. Breathing stops, the heart stops beating, and death follows rapidly. This is truly a state of death from acute alcoholic intoxication. However, in spite of hospital reports which frequently state death due to alcoholic intoxication, death rarely occurs from this because of a self-limiting factor. In other words, long before a lethal quantity of alcohol could be consumed, the drinker wouldn't be able to bend his elbow any longer and so he would stop for a while. Rarely does a person die of intoxication from alcoholic beverages.

Now throughout this entire progression of effects, the concentrations of alcohol are far too low to cause any organic damage to the brain. The disturbance is entirely a disturbance of function and is reversible on the elimination of the alcohol. When the alcohol disappears, the condition improves, the person becomes conscious again; and he becomes sober. This progression of effects resulting from the rising concentration of alcohol in the blood is not a unique property of alcohol. It can be produced indistinguishably in every detail by a great many other substances called anaesthetics. Alcohol is a powerful anaesthetic, just like ether or chloroform.

Differences in Tolerance

That there are great differences in tolerance for alcohol among people is a widely held belief. Are there wide differences in tolerance? Where do these ideas come from? The origin of one idea stems from differences in absorption of alcohol. People who have noticed these differences haven't observed them in a controlled, scientific way. Some people have observed, "Last New Year's when I took a drink, it really hit me. But now I can take four or five drinks and I'm quite all right." Of course, what they don't realize is that the first drink probably was on an empty stomach — the others followed dinner.

Differences in the personalities of people account for what seems to be variations in tolerance to alcohol. Alcohol raises the tempo of the personality. The person who

is normally the quiet, phlegmatic type takes a drink or two and becomes average. The average person takes a drink or two and becomes the life of the party. Then those who are normally the life of the party take a drink or two, and become nuisances. You see, it depends on where they started. These differences have often been interpreted as differences in tolerance.

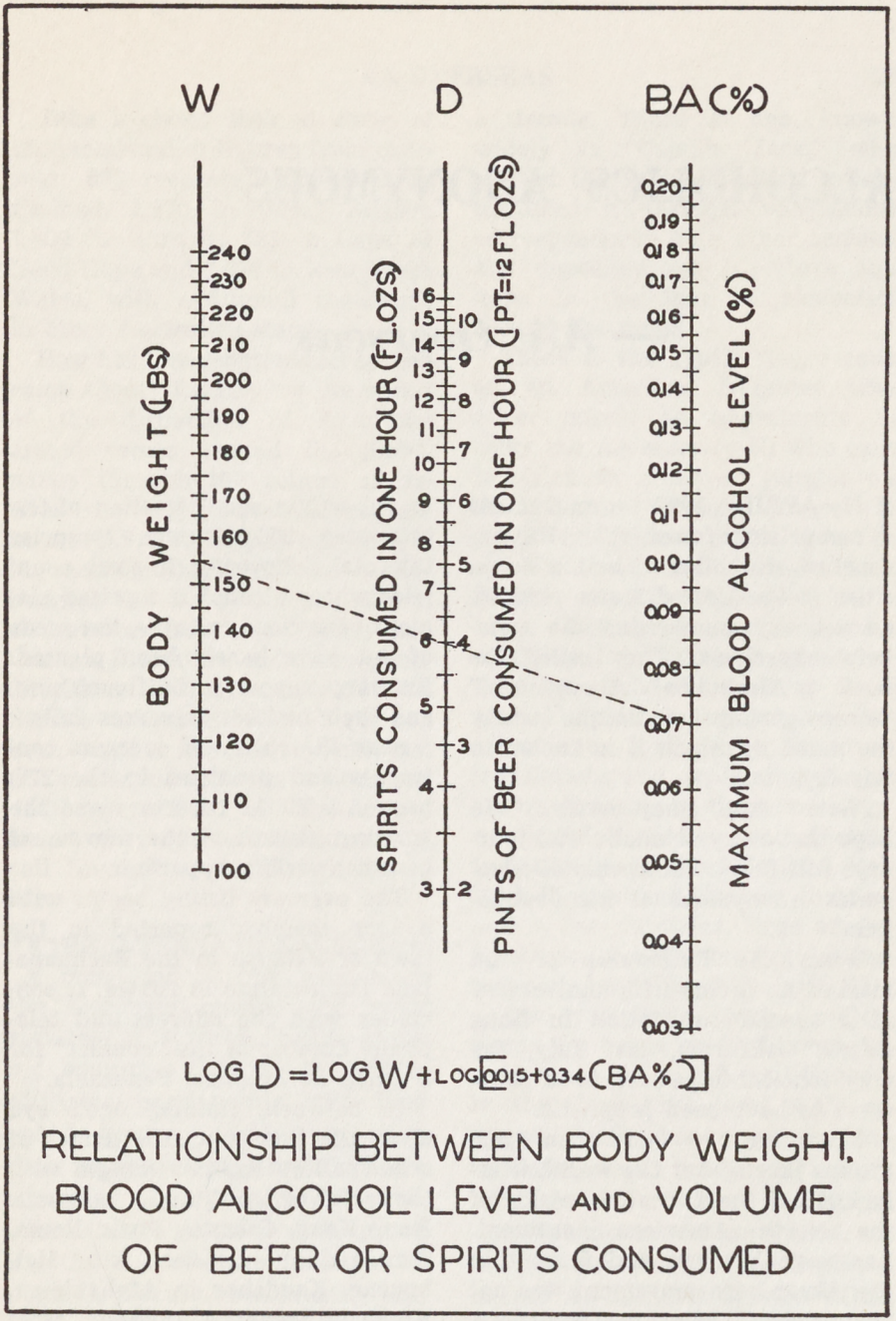
A man's motivation will determine how he behaves. For example, let's look at the man who goes to a party one night with congenial friends to celebrate his birthday. He's in the mood; he lends himself to enjoying the evening. He takes some drinks and people look at him and say, "Well, George is having a fine time—he's high." Then suddenly somebody walks in and whispers in George's ear that his best friend has dropped dead. George just straightens right up, and walks out of there—apparently no longer drunk. Now has there been a change in his tolerance? Has he become sober? No. The motivation that underlies his behavior in this mild state of intoxication has changed.

Another very important factor is learning or experience. The man who has been drunk many times gets his "sea legs" like a sailor who learns to walk straight even though the deck is pitching and tossing. He has had considerable experience; he has learned how to control his weaknesses when he's intoxicated.

The Complexity of Physiological Effects

Now I have covered only the effects of alcohol on behavior and on the central nervous system. There are other effects of alcohol: on the liver, on digestion, on the gastric tubes; on the distribution of water in the body, giving rise to the phenomenon of thirst that is so characteristic of intoxication. There isn't time to discuss these today. The important effect, as far as we are concerned, is on the central nervous system—on the brain.

From this afternoon's discussions, I trust that most of you will sense the subtlety and complexity of the physiological effects of alcohol in different amounts as manifested by the alteration in bodily functions and in the behavior of the individual. The meagre knowledge and the fallacious beliefs of not too many years ago gave rise to concepts of alcohol and the alcohol problem that perhaps made up in satisfying simplicity what they lacked in painful reality. If some of the scientific facts learned in recent years about the effects, the physiological effects of alcohol, conflict painfully with your favorite theories, they will, I hope, together with the facts given you from other fields, help you to formulate constructive, realistic concepts of the problems of alcoholism. I hope at least that they will help to guide you away from superficial, erroneous, and ultimately useless conclusions.



RELATIONSHIP BETWEEN BODY WEIGHT, BLOOD ALCOHOL LEVEL AND VOLUME OF BEER OR SPIRITS CONSUMED

To calculate the concentration of alcohol in the blood, draw a line from the body weight (W) through the amount of alcohol consumed (D). **NOTE:** D = alcohol consumed in one hour or less within two hours of eating a meal. BA% = percentage of alcohol in the blood 75 minutes after the end of drinking or 135 minutes from the start of drinking.

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ALCOHOLICS ANONYMOUS

— *AA Overseas*

IN APRIL, 1939 a movement comprising fewer than 100 recovered alcoholics in half a dozen cities in the United States published a book summarizing the members' experience. They called the book "Alcoholics Anonymous," thereby giving their unique society the name by which it is known to this day.

"Some day," they wrote, "We hope that every alcoholic who journeys will find a Fellowship of Alcoholics Anonymous at his destination."

When the Fellowship of AA marked its twenty-fifth anniversary at a special convention in Long Beach, California, last July, the once fanciful hope seemed in retrospect to have been prophetic.

There are now more than 8,000 groups throughout the world, nearly 1,000 of them located outside of the North American continent. Language barriers and fears that the Akron-born movement was not "exportable" have not kept AA from being accepted in more than 80 countries on five continents.

The 15,000 overseas members are as yet only a small fraction of the estimated 250,000 who comprise the total Fellowship. In some countries where alcohol is a prized element of ancient cultures, the seeds of AA have barely been planted. But they appear to be flourishing, and their number increases daily.

Scan the roster of overseas continents and countries in the 272-page AA World Directory and the amazing growth of the movement becomes vividly apparent.

The overseas listing begins with a lone member reported in the town of Palapye in the Bechuanaland Protectorate in Africa. It concludes with the address and telephone number of the "contact" for a group in Valencia, Venezuela.

In between, running one's eye down the fine print, the names of cosmopolitan capitals mingle with those of small jungle outposts. Hong Kong, Calcutta, Paris, Rome, Amsterdam, London and Melbourne. Kandahar in Afghanistan, Kitwe in Northern Rhodesia, Suva in the Fiji Islands, Tweed Heads in New South Wales and Penang in Malaya.

Take a closer look at some of the membership figures from overseas: 832 recovered alcoholics in Finland, 1,475 in Great Britain, 1,309 in Norway, 523 in Cape of Good Hope and 2,077 in New South Wales, with additional thousands in other Australian states.

How has this geographical spread come about? Largely, as the result of the dispersion of American armed forces around the globe, partly through the return of natives who adopted the AA program in the U.S. and helped establish it in their motherlands and partly through the word-of-mouth efforts of travelers from this country and Canada. Literature and correspondence from the movement's General Service Office in New York has been another key factor. And, last but not least, there have been the dedicated efforts of the special breed of recovered alcoholics who call themselves AA Internationalists.

THE INTERNATIONALISTS are men—and a few women—in the merchant marine and naval services of several English-speaking countries. Unable to become affiliated permanently with land-based groups, anxious to share their sobriety with other alcoholics who may want help, the Internationalists are credited with spreading the AA message in scores of ports they could once identify only by the names on waterfront bars.

Several have already become legendary in AA in little more than a decade. There is one, known widely as "Captain Jack," who started the Internationalist group, nurtured it through voluminous correspondence with other seamen and deposited AA literature and hope in the laps of alcoholics around the world.

There is the gentle Negro cook on an American freighter who never misses an opportunity to carry the AA story to all who care to listen in cities or jungles on the African continent. There are groups in Zululand, in Natal and in the Transvaal that consider this friendly man their sponsor.

As clusters of groups become established in overseas countries, they have tended to set up loose service structures, exchanging AA experience, arranging literature translations and explaining the recovery program to doctors, clergymen and law enforcement officials. In Australia, England, Ireland, Holland, Finland and Norway, to name only a few countries, large annual meetings are becoming regular features of AA fellowship. With only a few exceptions, these developments are based on traditional AA experience in the U.S. and Canada, in the sense that local AA's cooperate with, but never become affiliated with, public or private agencies in the field of alcoholism.

As the movement has spread, additional burdens have been placed on the AA General Service Office in New York. Inquiries on the recovery program and on group procedures are received almost daily

from overseas. Interest in translations of literature is growing. To date this has been met largely through the translation of pamphlets into French, Spanish, German, Finnish, Swedish, Portuguese and Norwegian. A special edition of the movement's basic text, "Alcoholics Anonymous," has been available to Latin American readers for several years and a Norwegian edition, published in Oslo, was released in the Fall of 1959.

The dream of finding AA fellowship at the end of any journey is rapidly becoming a reality.

This is one of a series of articles relative to the fellowship of Alcoholics Anonymous, as prepared and released by General Service Office of Alcoholics Anonymous.

Seventh Annual

North Conway Institute

June 12 - 16, 1961

Theme: "The Church, the Alcoholic, and the Community."

Speakers include: The Reverend John C. Ford, S.J., The Reverend David F. Krampitz, Rabbi Joseph Klein, The Reverend Mark Shedron, The Reverend George Hagmaier, C.P.S., The Reverend Robert Regan, Jr., Ebbe Curtis Hoff, Ph.D., M.D., Joseph Adlestein, M.D., John Pasciutti, Ph.D., Hudson Taylor Armerding, Ph.D., Mrs. Marty Mann.

Topics Include: 'Alcoholism as we know it Today,' 'Should a Minister Drink,' 'Therapy for Alcoholics,' 'What the Churches Think About Alcoholism,' 'Counselling With the Alcoholic.'

The Fee for registration, room, and board for the five day period will be $75.00. A few scholarships are available through the North Conway Foundation.

For more information and a copy of the program, write to:

Mrs. Jerome E. Graves,
The North Conway Foundation,
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Volume II, Number 5, Edmonton, March, 1961

THE THERAPIST

Hostility as a Barrier To Therapy in Alcoholism

The therapist's attitude is also discussed by Dr. Carson in his article 'A Psychiatrist Looks at Alcoholism' on page four

The professional person who selects the field of alcoholism for specialization presumably has rid himself of all negative feelings about inebriety before the choice is made. In his conscious mind, at least, he has faced the common prejudices and found them unsound, repressive.

Objectivity is required in the treatment of *any* emotional disturbance. In work with problem drinkers, however, objectivity is both uniquely important for success and at the same time sorely tested. Both the latter problems have been critically examined by M. L. Selzer (Ypsilanti State Hospital, Michigan) in the light of personal experience.

Although he is now glibly labeled a "sick" person on all sides, the alcoholic is still an unwelcome patient in many therapeutic settings. Because of the nature of his illness, hospital personnel, for example, sometimes express frank resentment toward him. But far more insidious, Selzer suggests, are the unconscious forms of disrespect which can be observed even among psychiatrists and caseworkers who have made alcoholism their professional focus. The hostility shows itself in subtle ways, but the most striking example, in Selzer's opinion, is the demand made of the patient that he give up drinking completely and at once. Then if he is unable to comply with this request, the therapist soon brands him as hopeless.

The request in itself is unrealistic, Selzer believes. In treating other emotional illnesses, the psychiatrist does not begin by stipulating that the patient must first of all abandon his major symptoms. The kleptomaniac, for instance, is not told in the first therapeutic interview that he must never steal again. Over the years, drinking

has become the alcoholic's only effective defense. Yet "No compunction is felt in trying to strip the alcoholic of his drinking even before any therapeutic effort is made to help him find other means of handling his anxiety."

Selzer does not imply that the alcoholic should be told that he may drink. Rather it should be assumed that he may feel *compelled* to drink, that his symptoms will not vanish overnight. The goal of immediate sobriety is too lofty and often unattainable in any immediate sense. To insist upon it is to join the ranks of the alcoholic's family and friends: "The alcoholic will merely add the therapist to the long list of authority figures he must defy — usually by drinking." Instead of urging the patient to abstain, which he already knows intellectually he must do, the therapist might better concentrate on exploring the emotional problems, particularly in terms of why the patient feels that he *must* drink at certain times. "The alcoholic may reach abstinence only after a great deal of effort over a period of months and even years."

To set unrealistic therapeutic goals and then to equate the almost inevitable disappointment with failure — these are marks of unconscious hostility, in Selzer's opinion. If the therapist expected less, if he set his sights lower, the results would be better for all concerned. The problem drinker's relapses could be accepted with greater tolerance. Neither patient nor therapist would feel constantly threatened by the spectre of "failure." In a more relaxed atmosphere, both could take pride in slower but very real achievement.

One other possible source of hostility in the therapist dealing with alcoholic patients is pointed out. Both Selzer and G. Lolli (New York City) offer a tentative explanation in terms of unconscious envy. For the alcoholic, no one will deny that excessive drinking culminates in excruciating pain. But on some level, or at some stage of intoxication, there is orgiastic pleasure also — psychic, physical — the degree and the components depending on the person and occasion.

It is not that the therapist wishes that he too could go out and get drunk when problems loom large. It is not necessarily the gross drinking itself which is envied, but rather the alcoholic's "inexorable pursuit of pleasure by forbidden or socially unacceptable means." It is the apparent shameless self-indulgence, the throwing aside of civilized restraints, which is enviable at the same time that it is repulsive to the person who is grimly trying to face problems in sobriety and to repress the drives that are taboo. "Small wonder, then, that envy at this all-out hedonism must be disguised behind a façade of contempt for the patient."

These are only two possible sources of unconscious hostility in the therapist. Doubtless there are others. In the interaction between

two human beings, objectivity cannot be sustained at every moment, even when it is the professional goal. But hostility, contempt — no matter how subtle — will militate against success in treatment. Since this has been the attitude of family, friends, community, during his entire drinking career, the alcoholic patient will be overly quick to sense it and will respond with extraordinary vehemence — most likely with another bout. In Selzer's words, "The hostile therapist not only will fail to help the patient, but will accentuate his drinking patterns. . . . Only in a warm and permissive atmosphere can the alcoholic best be helped on the road back toward a less malignant adjustment."

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MEDICAL

Mortality in Delirium Tremens

Delirium tremens has always been considered a very serious disease. The mortality rate from it was reported in the past (1916) to be as high as 75 per cent. In more recent times the fatality rates have generally not been higher than 15 per cent. In the course of developing modern treatment techniques, during the past 25 years, numerous investigators have shown that the mortality from delirium tremens can be brought down to 1 or 2 per cent, and even to zero. The occasional deaths could clearly be attributed to intercurrent diseases and complicating factors.

In spite of this, reports keep on appearing in the literature which describe again the successful lowering of the mortality rate in delirium tremens from about 15 per cent to the unavoidable single or exceptional cases. The success is achieved with a new approach — it may be an improved regimen or a new drug. Remarkably, these reports cover a great variety of treatments and approaches.

This subject was recently taken up by L. - M. Gunne (Sweden), who compiled data from the world literature of the past hundred years in which both the type of treatment and mortality rates were reported. In seven of these reports, dated between 1907 and 1957, the type of therapy was changed, and with this, the mortality rate fell. In comparing the two series within each of these seven reports, an interesting fact emerged: the mortality invariably decreased after a change in therapy, regardless of which method was used first. The explanation thus suggests itself that, as the physician and his staff become interested in studying the effects of a new treatment, their attention to the individual patient is greatly increased, nursing care is correspondingly improved, and this is reflected in the outcome: the mortality rate drops to near zero. When the new treatment becomes routine, the interest of the physician wanes, the staff pays less attention to the individual patient, and mortality rises until reduced again by the same process.

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GUNNE, L. - M. Mortaliteten vid delirium tremens. Nord. Med. 60: 1021 - 1024, 1958.

In Memorium

Everett M. Bliss, a member of the Grande Prairie Citizen's Advisory Committee, died on Tuesday, March 14, 1961 at his home following a recent serious illness.

'Ev' was loved and respected by all who knew him. His contribution to his fellow men and the community of Grande Prairie was an immeasurable one. The warmth of his friendship and the quality of service he rendered to all who knew or needed him is irreplaceable.

We would extend to his wife, Milly, our deepest sympathy and continued affection.

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The illustrations in Progress are by Harry Heine

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